

Homothetic  
Similarity  
 $\tau_1 = \tau_2 = \tau_3$

$$\tau_3 = \frac{\lambda_3^{(2)}}{\lambda_3^{(1)}} = 2$$

$$\mathbf{\Lambda}_1 = \text{diag}([1, 1, 2])$$

$$\mathbf{\Lambda}_2 = \text{diag}([2, 2, 4])$$

$\text{conv}(\mathbf{P}_2)$

$\text{conv}(\mathbf{P}_1)$

$$\tau_1 = \frac{\lambda_1^{(2)}}{\lambda_1^{(1)}} = 2$$

$$\tau_2 = \frac{\lambda_2^{(2)}}{\lambda_2^{(1)}} = 2$$

